

SEMICONDUCTOR DEVICE AND METHOD OF FORMING THE SAME

ABSTRACT OF THE DISCLOSURE

A semiconductor device protecting the ends of a gate line and a method of forming the same are disclosed. The semiconductor device includes a semiconductor substrate, a gate line crossing over the semiconductor substrate, and a protecting pattern covering ends of the gate line. According to the method, a gate line is formed at a semiconductor substrate. A spacer is formed to cover sidewalls of the gate line. A protecting pattern is formed to cover the ends of the gate line. The protecting pattern may be formed of silicon nitride or silicon oxide. Since the protecting pattern protects ends of a gate line, it is possible to prevent gate electrodes from being damaged by a cleaning solution such as SC1 in a subsequent process.